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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/789,811	02/27/2004	John Berge	RDYN.MRS.18/US	5632
25871	7590	04/08/2005	EXAMINER	
SWANSON & BRATSCHUN L.L.C. 1745 SHEA CENTER DRIVE SUITE 330 HIGHLANDS RANCH, CO 80129			DENTZ, BERNARD I	
			ART UNIT	PAPER NUMBER
			1625	

DATE MAILED: 04/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/789,811

Applicant(s)

BERGE ET AL.

Examiner

Bernard Dentz

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) 2,4,5,12 and 13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,3 and 6-11 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10-18-2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

In the restriction requirement the composition goes with the compound which is the active ingredient.

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1, 2, 6-8, 10 and 11, drawn to heteroaryl imidazoles, classified in class 548, subclass 303.7 e.g..
 - II. Claims 1, 3 and 6-11, drawn to quinolinones, classified in class 546, subclass 153 e.g.
 - III. Claims 1, 4 and 6-11, drawn to benzimidazoles, classified in class 548, subclass 304.7 e.g.
 - IV. Claims 1,5,7,8,10 and 11, drawn to fused heteroaryl pyridones, classified in class 546, subclass 114 e.g.
 - V. Claims 1,7,8,10 and 11, drawn to fused aryl pyrimidones, classified in class 544, subclass 292 e.g.
 - VI. Claims 1 and 5-11 drawn to fused heteroaryl pyrimidones, classified in class 544, subclass 278 e.g.
 - VII. Claim 12, drawn to a process for making an intermediate which is an alkenylthienylcarboxaldehyde containing compound using organoboron containing compound, classified in class 549, subclass 73.
 - VIII. Claim 13, drawn to a process for making an intermediate which is a fluoroalkenylthienylcarboxaldehyde using a chlorosilane, classified in class 549, subclass 73.
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The inventions are distinct, each from the other because:

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The processes are distinct and independent and make intermediates, not the final products. The intermediates have other utilities. Amongst the compounds the art discloses similar compounds with the same utility in different patents based on the instant different values of the Z group.

Because these inventions are distinct for the reasons given above and the searches required for the Groups are different restriction for examination purposes as indicated is proper.

During a telephone conversation with Ms. Yoerg on 3-31-2005 a provisional election was made without traverse to prosecute the invention of Gp. II, claims 1,3 and 6-11. Affirmation of this election must be made by applicant in replying to this Office action. Claims 2,4,12 and 13 and the non-elected parts of claims 1 and 6-11 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

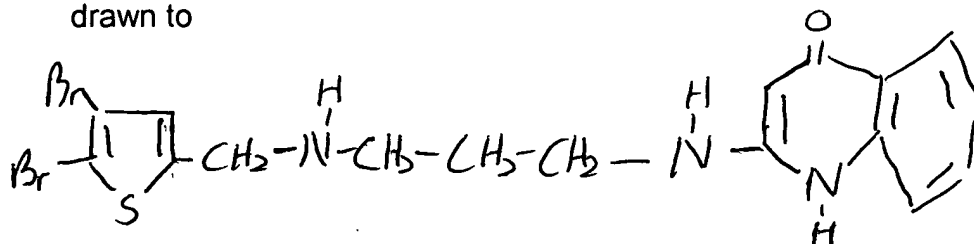
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,3 and 6-11 are, rejected under 35 U.S.C. 103(a) as being unpatentable over Berge et al, US Patent 6,320,051 cited by applicants. It discloses a genus of 1,3-diaminopropanes substituted by an optionally substituted 2-(quinolin-4-onyl) moiety on one amino group and a 1-(aryl)alkyl or a 1-(heteroaryl)alkyl moiety on the other for the same antibacterial activity. Note that the heteroaryl group can be thienyl and that

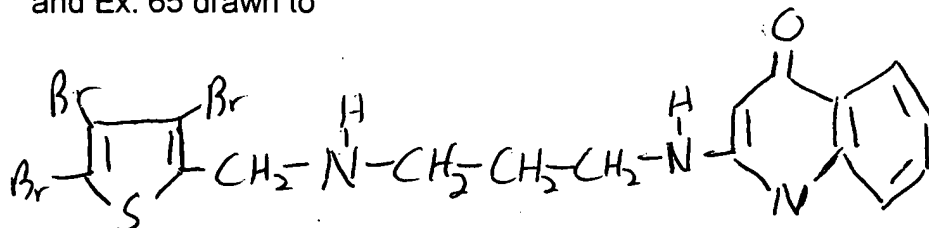
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preferably it is substituted by 2 or 3 lipophilic moieties such as chloro, bromo, iodo, methyl, methoxy, ethoxy or trifluoromethyl. See col. 2, lines 28-35. See also Ex. 37

drawn to



and Ex. 65 drawn to



See also claim 3 where thienyl is specifically claimed. Thus it would have been obvious for the ordinarily skilled to modify the specific compounds made in the examples by substituting methyl or like group for the 3-hydrogen atom in the compound of Ex. 37 and making the 3-methyl-4,5-dibromothieryl analog which falls within the instant claims. The broad disclosure of the desirability of having 2 or 3 lipophilic groups on the thienyl is behind this.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 6-8, 10 and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 6, penultimate line quinolone is

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intended. Claims 7, 10 and 11 are improper multiply dependent claims because they depend on multiply dependent claims. Claim 0 is improper because it is a "use of claim".

The non-elected subject matter should be cancelled.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bernard Dentz whose telephone number is 571-272-0683. The examiner can normally be reached on Mon-Fri from 8 to 4:15.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cecilia Tsang, can be reached on 571 272-0562. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dentz

4-1-2005



BERNARD DENTZ
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GROUP 1625